#1

Number of Bees	Weight	Sample Name	ng/g Dinotefuran	ng/g Nitenpyram
32.10213777	1.3515	Brushy quarry A	31.013	44.962
47.70546318	2.0084	Doug McCracken B_1	2.229	83.672
17.97862233	0.7569	Doug McCracken B_2	6.527	nd
45.67458432	1.9229	home apiary #1A_1	26.162	nd
24.76484561	1.0426	Home apiary #1A_2	18.302	85.481
47.39904988	1.9955	Home yard #2B_1	6.846	45.800
34.73159145	1.4622	Home yard #2B_2	1.686	3.989
27.03562945	1.1382	Pickle station C	19.029	5.960

Explaination of value modification from preliminary dataset shared with OSU

Number of Bees	Weight	Sample Name	Dinotefuran	Nitenpyram
32.10213777	1.3515	Brushy quarry A	Failed Q/C check	C ion not present
47.70546318	2.0084	Doug McCracken B_1	Failed Q/C check	Failed Q/C check
17.97862233	0.7569	Doug McCracken B_2	Failed Q/C check	Failed Q/C check
45.67458432	1.9229	home apiary #1A_1	Failed Q/C check	
24.76484561	1.0426	Home apiary #1A_2	Failed Q/C check	Failed Q/C check
47.39904988	1.9955	Home yard #2B_1	Failed Q/C check	Failed Q/C check
34.73159145	1.4622	Home yard #2B_2	Failed Q/C check	Failed Q/C check
27.03562945	1.1382	Pickle station C	Failed Q/C check	Q ion not present

Q = quantification ion
C = confirmation ion
ND = not detected in sample
Q/C = ration of quantification/confirmati
SRM = selected reaction monitoring (MS

Final concentration values (ng/g dry weight)

Number of Bees	Weight	Sample Name	ng/g Dinotefuran	ng/g Nitenpyram
32.10213777	1.3515	brushy quarry a	< 2.00	< 7.75
47.70546318	2.0084	Doug McCracken B_1	< 2.00	< 7.75
17.97862233	0.7569	Doug McCracken B_2	< 2.00	< 7.75
45.67458432	1.9229	Home apiary 1a_1	< 2.00	**4.72**
24.76484561	1.0426	Home apiary 1A_2	< 2.00	< 7.75
47.39904988	1.9955	Home yard 2b_1	< 2.00	< 7.75
34.73159145	1.4622	Home yard 2b_2	< 2.00	< 7.75
27.03562945	1.1382	Pickle station	< 2.00	< 7.75

Notes on data QAQC: To QAQC the data, first the areas of both the quantification and confirmatior
Excalibur). The ratios of the quantification:confirmation ions were calculatec
this range, a filter was applied to all values detected in the bee samples. Des
not pass the ratio filter. Other reasons for failing this check included the abs

detect represents the complete absence of an integratable peak in the chron
statistical rigor if necessary. For values below the intrument detection limit (
the value reported is < IDL. Raw peak areas of the samples are included on t
after dividing the IDL by 2 which is a common way of handling this type of da

ng/g	ng/g	ng/g	ng/g	ng/g
Thiamethoxam	**Clothianidin**	**Imidacloprid**	**Acetamiprid**	**Thiacloprid**
3.303	13.111	7.087	4.330	0.847
6.517	18.827	3.875	3.327	1.370
4.478	20.761	5.229	1.109	25.704
0.521	14.939	3.772	0.392	1.063
3.863	nd	1.933	15.025	68.473
7.474	20.370	0.607	4.167	0.671
2.358	50.579	0.668	1.924	0.104
11.533	11.321	4.575	3.483	3.428

Thiamethoxam	**Clothianidin**	**Imidacloprid**	**Acetamiprid**	**Thiacloprid**
Failed Q/C check		True ND	C ion not present	Failed Q/C check
		True ND	Failed Q/C check	True ND
C ion not present		True ND	C ion not present	
Failed Q/C check		True ND	C ion not present	
Q ion not present		True ND	Failed Q/C check	
Failed Q/C check		True ND		
Failed Q/C check		True ND	C ion not present	True ND
Failed Q/C check	Failed Q/C check	True ND		

ion ion SRM transition
/MS)

ng/g	ng/g	ng/g	ng/g	ng/g
Thiamethoxam	**Clothianidin**	**Imidacloprid**	**Acetamiprid**	**Thiacloprid**
< 11.16	**26.35**	< 1.69	< 0.72	< 0.61
9.18	**48.42**	< 1.69	< 0.72	< 0.61
< 11.16	**51.97**	< 1.69	< 0.72	**24.04**
< 11.16	**19.60**	< 1.69	< 0.72	**2.02**
< 11.16	**38.74**	< 1.69	< 0.72	**22.57**
< 11.16	**35.37**	< 1.69	**1.13**	**0.87**
< 11.16	**67.31**	< 1.69	< 0.72	< 0.61
< 11.16	< 4.50	< 1.69	**0.73**	**1.82**

n ions were hand integrated using the instrument's software (Qual in
d for all 7 neonic standards to provide a range of acceptable values. Using
signation 'failed Q/C check' were used to replace preliminary data that did
ence of either the quantification (Q) or confirmation (C) ions. True non-

natograms. This is a very conservative effort and can be modified with
(calculated by integrating the instument signal background of n=10 blanks),
he right. Two values (below 'IDL') are reported as they would still remain
ıta.

		Quantificat	Confirmation ion for internal stand		
		214	184	Quantificat	Confirmatic
Dino	brushy quarry a	1.05E+08	61309454	79873	404526
Niten	brushy quarry a	1.05E+08	61309454	243979	0
Thia	brushy quarry a	1.05E+08	61309454	6235893	699940
Cloth	brushy quarry a	1.05E+08	61309454	943268	736134
Imid	brushy quarry a	1.05E+08	61309454	0	0
Acet	brushy quarry a	1.05E+08	61309454	259688	0
Thiac	brushy quarry a	1.05E+08	61309454	650465	59497
Dino	Doug McCracken B_1	88185885	53022077	215761	1074212
Niten	Doug McCracken B_1	88185885	53022077	497561	654377
Thia	Doug McCracken B_1	88185885	53022077	744047	682209
Cloth	Doug McCracken B_1	88185885	53022077	2168106	1948317
Imid	Doug McCracken B_1	88185885	53022077	0	0
Acet	Doug McCracken B_1	88185885	53022077	677199	4341343
Thiac	Doug McCracken B_1	88185885	53022077	0	0
Dino	Doug McCracken B_2	1.51E+08	92244007	219307	284982
Niten	Doug McCracken B_2	1.51E+08	92244007	115878	361594
Thia	Doug McCracken B_2	1.51E+08	92244007	177642	0
Cloth	Doug McCracken B_2	1.51E+08	92244007	1499408	745347
Imid	Doug McCracken B_2	1.51E+08	92244007	0	0
Acet	Doug McCracken B_2	1.51E+08	92244007	226303	0
Thiac	Doug McCracken B_2	1.51E+08	92244007	6538258	1452679
Dino	Home apiary 1a_1	1.2E+08	70429034	54790	107126
Niten	Home apiary 1a_1	1.2E+08	70429034	744591	420734
Thia	Home apiary 1a_1	1.2E+08	70429034	127537	319324
Cloth	Home apiary 1a_1	1.2E+08	70429034	1141688	1290277
Imid	Home apiary 1a_1	1.2E+08	70429034	0	0
Acet	Home apiary 1a_1	1.2E+08	70429034	958082	0
Thiac	Home apiary 1a_1	1.2E+08	70429034	1108225	226925
Dino	Home apiary 1A_2	1.37E+08	83064097	84344	438116
Niten	Home apiary 1A_2	1.37E+08	83064097	205973	264472
Thia	Home apiary 1A_2	1.37E+08	83064097	0	772933
Cloth	Home apiary 1A_2	1.37E+08	83064097	1394933	880502
Imid	Home apiary 1A_2	1.37E+08	83064097	0	0
Acet	Home apiary 1A_2	1.37E+08	83064097	1380464	181695
Thiac	Home apiary 1A_2	1.37E+08	83064097	7663211	1737103
Dino	Home yard 2b_1	1.12E+08	64767210	106434	955461
Niten	Home yard 2b_1	1.12E+08	64767210	336349	362947
Thia	Home yard 2b_1	1.12E+08	64767210	142688	1383868
Cloth	Home yard 2b_1	1.12E+08	64767210	1995838	2039276
Imid	Home yard 2b_1	1.12E+08	64767210	0	0

Acet	Home yard 2b_1	1.12E+08	64767210	492634	122004
Thiac	Home yard 2b_1	1.12E+08	64767210	461070	191831
Dino	Home yard 2b_2	1.09E+08	64536009	93422	29334
Niten	Home yard 2b_2	1.09E+08	64536009	490781	628355
Thia	Home yard 2b_2	1.09E+08	64536009	389593	817284
Cloth	Home yard 2b_2	1.09E+08	64536009	2708588	1687595
Imid	Home yard 2b_2	1.09E+08	64536009	0	0
Acet	Home yard 2b_2	1.09E+08	64536009	392319	0
Thiac	Home yard 2b_2	1.09E+08	64536009	0	0
Dino	Pickle station	1.63E+08	98094687	85421	410812
Niten	Pickle station	1.63E+08	98094687	0	247205
Thia	Pickle station	1.63E+08	98094687	353960	561568
Cloth	Pickle station	1.63E+08	98094687	286884	367945
Imid	Pickle station	1.63E+08	98094687	0	0
Acet	Pickle station	1.63E+08	98094687	266135	69953
Thiac	Pickle station	1.63E+08	98094687	805656	251942

Ratio of quanti	If Ratio of Q/C falls within certain range keep value or else 0		
Ratio of Q/C	If, then	Ratio (Quai	Concentration
0.197448372	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8.909182216	0	0	0
1.281380836	943268	0.009002	0.035610852
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
10.9327361	0	0	0
0.200855138	0	0	0
0.760358326	0	0	0
1.090643776	744047	0.008437	0.018438062
1.112809671	2168106	0.024586	0.097253304
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.155988366	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.769546849	0	0	0
0.320464388	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2.011691199	1499408	0.009944	0.039336025
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4.500827781	6538258	0.043362	0.01819412
0.511453802	**0**	**0**	**0**
1.769742878	744591	0.006212	0.009074598
0.399396851	0	0	0
0.884839457	1141688	0.009526	0.037680518
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4.883662003	1108225	0.009246	0.003879678
0.192515224	0	0	0
0.778808343	0	0	0
0	0	0	0
1.584247395	1394933	0.010211	0.040390009
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
7.597699441	0	0	0
4.411489129	7663211	0.056093	0.023535842
0.111395442	0	0	0
0.926716573	0	0	0
0.1031081	0	0	0
0.978699303	1995838	0.017844	0.070585398
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

4.037851218	492634	0.004404	0.002251185
2.40352185	461070	0.004122	0.001729636
3.184768528	0	0	0
0.781056887	0	0	0
0.476692313	0	0	0
1.60499883	2708588	0.02488	0.098418331
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0.207932095	0	0	0
0	0	0	0
0.63030657	0	0	0
0.779692617	0	0	0
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
3.80448301	266135	0.00163	0.000833167
3.197783617	805656	0.004935	0.002070526